ASTHA ONLINE DAIRY FARM

BY

S.M. TAKI UDDIN

ID: 142-15-4065

This Report Presented in Partial Fulfillment of the Requirements for the Degree of Bachelor of Science in Computer Science and Engineering

Supervised By

Dr. Sheak Rashed Haider Noori

Associate Professor and Associate Head

Department of CSE

Daffodil International University

DAFFODIL INTERNATIONAL UNIVERSITY

DHAKA, BANGLADESH

APPROVAL

This Project titled **"**ASTHA ONLINE DAIRY FARME**,**" submitted by S.M. Taki Uddin, Nirmal Datta to the Department of Computer Science and Engineering, Daffodil International University, has been accepted as satisfactory for the partial fulfillment of the requirements for the degree of Bachelor of Science in Computer Science and Engineering and approved as to its style and contents. The presentation has been held on ……, 2018.

BOARD OF EXAMINERS

Dr. Syed Akhter Hossain **Chairman**
Professor and Head
Department of Computer Science and Engineering
Faculty of Science & Information Technology
Daffodil International University

Dr. Sheak Rashed Haider Noori **Internal Examiner**
Associate Professor and Associate Head
Department of Computer Science and Engineering
Faculty of Science & Information Technology
Daffodil International University

Md. Zahid Hasan **Internal Examiner**
Assistant Professor
Department of Computer Science and Engineering
Faculty of Science & Information Technology
Daffodil International University

Dr. Mohammad Shorif Uddin **External Examiner**
Professor
Department of Computer Science and Engineering
Jahangirnagar University

DECLARATION

We hereby, with all responsibility declare that, this project has been done by us under the supervision of **Dr. Sheak Rashed Haider Noori**, Associate Professor and Associate Head, **Department of CSE, Daffodil International University.** We also declare that neither this project nor any part of this project has been submitted elsewhere for award of any degree or diploma.

Supervised by:

_____

Dr. Sheak Rashed Haider Noori
Associate Professor and Associate Head
Department of CSE
Daffodil International University

Submitted by:

_____

(S.M. TAKI UDDIN)
ID: 142-15-4065
Department of CSE
Daffodil International University

ACKNOWLEDGEMENT

First we express our heartiest thanks and gratefulness to almighty Allah for His divine blessing makes us possible to complete the final year project successfully.

We really grateful and wish our profound indebtedness **Dr. Sheak Rashed Haider Noori**, Associate Professor and Associate Head, **Department of CSE, Daffodil International University.**, Dhaka. Deep Knowledge & keen interest of our supervisor in the field of "Artificial Intelligence" inspired us carrying out this project. His endless patience, scholarly guidance, continual encouragement, constant and energetic supervision, constructive criticism, valuable advice, reading many inferior draft and correcting them at all stage have made it possible to complete this project.

We would like to express our heartiest gratitude to **Dr. Syed Akhter Hossain, Head, Department of CSE**, **Daffodil International University,** for his kind help to finish our project and also to other faculty member and the staff of CSE department of Daffodil International University.

Finally, we must acknowledge with due respect the constant support and patience, inspiration, prayer and love of our parents.

ABSTRACT

In the year 2018, it is hardly a surprise that people are love online shopping. It should be increase day by day. In the present time people have become dependent on everything in online. Now day many sites or apps are used for these services and benefits. So for these types of services and facilities, we have an online delivery app. And this app is helpful for those who want to get home-grown products. Buyers can sit at home and watch products and order products through this app. So buyers and sellers can easily benefited by use this app. Finally, the motivation of this app and how it would benefit users and customers.. There are many families, who are very aware of their children's nutrition and intellectual development, they will be very much benefited.

Many families do not get perfect products even after having money, but many people do not agree with quality standards. This app is very popular and helpful for getting rid of such problems. This app use so easy everybody can use it.

TABLE OF CONTENTS

CONTENT	PAGE NO
Board of examiners	I
Declaration	II
Acknowledgements	III
Abstract	IV
CHAPTER	**PAGE NO**
CHAPTER 01: INTRODUCTION	**1-3**
1.1Introduction	1
1.2 Motivation	1
1.3 Objectives	1-2
1.4 Expected Outcome	2
1.5 Report Layout	3
CHAPTER 02: BACKGROUND	**4-5**
2.1 Introduction	4
2.2 Related Works	4
2.3 Comparative Studies	4
2.4 Scope of the Problem	4
2.5 Challenges	5
CHAPTER 03: REQUIREMENT SPECIFICATION	**6-10**
3.1 Business Process Modeling	6
3.2 Requirement Collection and Analysis	6-7
3.3 Use Case Modeling and Description	7-10
3.4 Logical Data Model	10
3.5 Design Requirements	10

CHAPTER 04: DESIGN SPECIFICATION **11-13**

4.1 Front-end Design 11

4.2 Back-end Design 11

4.3 Interaction Design and UX 12

4.4 Implementation Requirements 12-13

CHAPTER 05: IMPLEMENTATION AND TESTING **13-17**

5.1 Implementation of Database 13

5.2 Implementation of Front-end Design 13-16

5.3 Implementation of Interactions 16

5.4 Testing Implementation 17

5.5 Test Results and Reports 17

CHAPTER 6: CONCLUSION AND FUTURE SCOPE **17-18**

6.1 Discussion and Conclusion 17-18

6.2 Scope for Further Developments 18

REFERENCES 18-19

APPENDIX 19

CHAPTER 01

Introduction

1.1 Introduction

The people of the country want to take all the services and facilities at home. Today, internet just not a networking media site but also a global means of transaction for consumers. In the year 2018, it is hardly a surprise that people are love online shopping. It should be increase day by day. In the present time people have become dependent on everything in online. Now day many sites or apps are used for these services and benefits. So for these types of services and facilities, we have an online delivery app. And this app is helpful for those who want to get home-grown products. Buyers can sit at home and watch products and order products through this app. So buyers and sellers can easily benefited by use this app. Finally, the motivation of this app and how it would benefit users and customers. [1]

1.2 Motivation

In this project so many things motivated us. Like, in two member of our group were a member so much interested in Agriculture and farm. He want make a dairy farm thus we wanted to do something for farm based on online shopping app. That's what the job is, we sat together and planned this idea of making an online app for dairy farm. In the short run of business and in a short time, we started to make this app for more profits and facility of doing tasks. We think it would be more efficient, time saving, profitable and interesting also.

We know that now days become depend the online shopping. We wanted to make sure that easier for online customer. Then we are go on and made this app.

1.3 Objectives

The objectives of our project are point out below.

- To provide good services.
- Saves time and efforts.

- Convenience of shopping at home.
- Range of products are available.
- Good discounts / lower prices.
- To minimize time cost.
- We can compare various company.
- Know price and information of the product.

1.4 Expected Outcome

Now people want to get everything in very short time. And everyone is going to depend online. But people do not get the services online grown-product directly from the farm. But with this app, through very short period, and get direct products.

This online app or online shopping that provides not only time minimization but also gives pure products. There are many families, who are very aware of their children's nutrition and intellectual development, they will be very much benefited.

Many families do not get perfect products even after having money, but many people do not agree with quality standards. This app is very popular and helpful for getting rid of such problems. This app use so easy everybody can use it.

This app has following features:

- User can easily use.
- User can get response in an easier way.
- User will satisfy take service.
- User can also show the product list.
- It gives security for pure food.
- It reduces minimum charge.

1.5 Report Layout

The report is divide into five chapters. Each chapter deals with the different perspectives of "ASTHA DAIRY FARM ". Each chapter has various parts explaining in detail.

- **Chapter 1: Introduction**

  This chapter discusses about our app and it important our project. Here also discusses our project motivation, objectives and expected outcomes.

- **Chapter 2: Background**

  This chapter discusses our project related works, comparative studies and scope of the problem.

- **Chapter 3: Requirement Specification**

  This chapter discusses our project Business Process Modeling, requirement collection and analysis, use case modeling and description, logical data model and design requirements.

- **Chapter 4: Design Specification**

  This chapter discusses our project front-end design, back-end design, interaction design and UX and implementation requirements.

- **Chapter 5: Implementation and Testing**

  This chapter discusses about the front-end design, interactions, testing. Also discuss about test results and reports.

- **Chapter 6: Conclusion and Future Scope**

  This chapter discusses about the conclusion and future scope of our project.

CHAPTER 02
Background

2.1 Introduction

ASTHA DAIRY FARM online shopping based App. This chapter is having details about this app. Our target and challenges that we give the pure grown-product and get good service for removed the bad food.

2.2 Related Works

There are many app related online shopping but no more online farm related app. Our main goal is to provide products with a belief in a very short period of time.

2.3 Comparative Studies

ASTHA DAIRY FARM is an online based shopping app which provides services to user as a customer that they can see the product and list of product price. Buy product as their wish. We have seen some other applications which provide online shopping and their product are not this type.

2.4.1 Time Scheduling

Time scheduling during our project is given below in table 2.2

Time Scheduling Table 2.2:

Planning	3 Month
Design and Analysis	1 Month
Coding	3 Month
Testing and Implementation	1 Month
Total	8 month

2.4.2 Target of our Project

This online app or online shopping that provides not only time minimization but also gives pure products. There are many families, who are very aware of their children's nutrition and intellectual development, they will be very much benefited.

2.5 Challenges

The most challenging parts gain human love and faith. Many people suffer from lust in Bangladesh. Very easy to move grown-product from home to home.

CHAPTER 03

Requirement Specification

3.1 Business Process Modeling

Business process modeling is mapping to everyday business processes and finding aims and systems engineering is the activity of flow processes to improve them. It is a part of the practice of business process management.

3.2 Requirement Collection and Analysis

3.2.1 Software Requirements

For made this app we used these Software are:

- Operating System: Windows 7, Windows 8.1, Windows 10. Android studio.
- System Design: draw.io, flow chart.
- Language: Java, XML ,
- Database: Mysql.
- Tools: android studio.
- Debugger: android studio debugger.
- Internet connection: for order.

Software list, for use this app:

- Operating System: Install android studio in operating system.
- Device: Android phone.
- Network: Internet connection for order.

3.2.2 Hardware Requirements

For make this app we need this type of configure Hardware:

- Processor: Intel Core I3
- 2 GB RAM minimum, for good work 8GB
- 2GB minimum, for good work 4GB
- 1280 x 800 minimum screen resolution
- JDK 8

3.2.3 Functional Requirements

- Graphical User interface which the application user.
- Give ease of understanding to use the app through connected to internet for order and know update price or admin notice to be viwed to the user.

3.3 Use Case Modeling and Description

3.3.1 System Model

System module are tow part:

- User Module
- Admin Module

User Module

Use this app for product order, user work are:

1. **Registration**

   For new members when want to order product.

2. **Login Email**

   After registration customers or members can login into the email in the system.

3 Add or Select Product

After login to the system customer choose product for order.

4 Edit Profile

Members can edit his/her profile.

5 Payment

Members pay here product and service charge.

Admin Module

Use this Change product price and update app.

1 Registration

For new admin when start job.

2 Login to Email

After registration admin can login into the email in the system.

3 Add or Select Product

After login to the system admin can change product price.

4 Edit Profile and address

Admin can edit his/her profile.

5 Payment syestem

Admin accept and notify product price to customers.

3.3.2 Use Case Diagram and Description

A use case diagram and description is so important sector in this system. shown figure 3.3.2.1

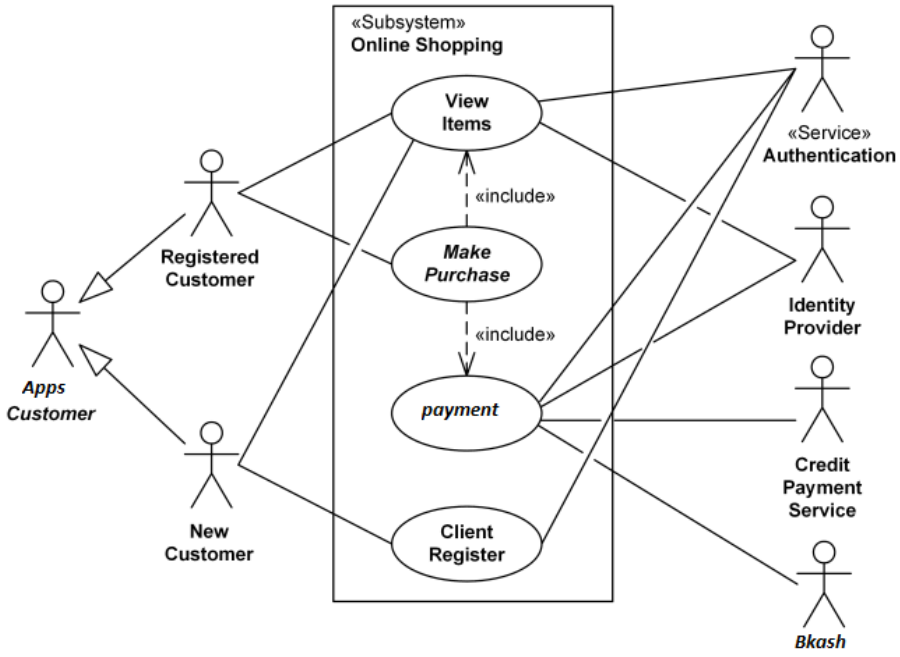


figure 3.3.2.1

Actor Customers

Flow up steps

a) This Use case starts when a user enters this app.
b) Customers can edit profile, add products for order, add shell command, search content online add email , read email, check weather report and read pdf file.

i. Signup

Brief Description: Customers can register the app

Actor: Customers

Flow of steps

a) This use case start when a customer registered the app system.

ii. Edit Profile

Brief Description: Customers can update Profile.

Flow of steps

a) This use case start when a client login to the app.
b) Customers see profile information and update profile information.

iii. Add Product

Brief Description: Admin can update custom command list .

Actor: Admin

Flow of steps

a) This use case start when admin login to the app.
b) Admin sees the customer order list and update the list.

iv. Login To Email

Brief Description: Admin and customer both sees email.

Actor: Admin and customers

Flow of steps

a) This use case start when Admin and customer login to the system.
b) When Admin and customer is connected with internet can login to email.

3.4 Logical Data Model

Logical data modeling is the process that data design and manage to a diagram. A logical data model produce all the information about the variable entities and the relationships between and store it in a database. An entity in this context is a component of data. In other hand, ER diagrams illustrate the logical structure of databases.

3.5 Design Requirements

When designing systems or software, following issues must be considered that reproduce the overall design of the goals that the system expected to achieve. The following goals were kept in mind while designing the system:

Make system easy and user friendly for users: The app users are able to have a great amount of order product. Make sure this app compatible.

CHAPTER 04

Design Specification

4.1 Front-end Design

We know that people always want to go easy way. Thus, we design it simple, use simple word, and other hand user friendly. In front-end design, our App home page shown in Table 4.1.

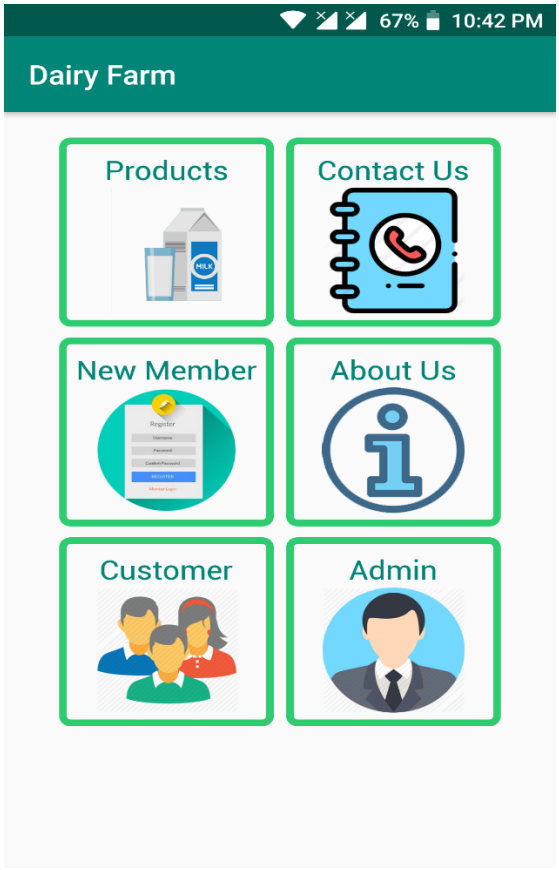


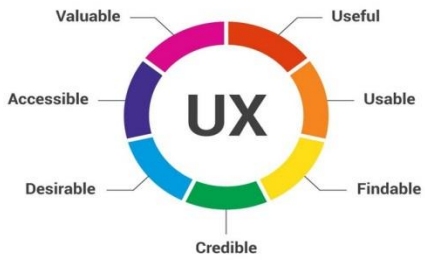
Figure 4.1:Front end design

4.2 Back-end Design

Our App can be use online know update products price. In back-end Design use admin database. The user has no need access to Back-End Design.

4.3 Interaction Design and UX

User Experience (UX) is the base to the success or loose of a product in the market. And Interaction Design is one of the most important part of User Experience (UX) design. For take success of any app or application depends on User use or peace. How an application is more suitable and attractive to the user is depends on interaction and Design part. In our app, we used the useful model of interactive design in order to make our product graceful as well as simple.
The following figure 4.2 [3] shows There are 7 factors that describe user experience, according to Peter Morville.



.

Figure 4.3: The 7 Factors that Influence User Experience [5].

Home Screen Interaction Design and UX:

We have designed our Home Screen in a manner where there's no need of login and registration. When the application is open to the user they show heads up display. And ASTHA DAIRY FARM greets the user and says that it's online and ready to use.

Dashboard Screen Interaction Design and UX:

We have design Dashboard screen for every user. In user dashboard, they can see their profile, edit profile, custom command, social command, web command, and login email.

4.4 Implementation Requirements

Implementation Requirement is given below:

This app Customer actor uses some to make purchases online. Top level use cases are View Items, Make Purchase and Client Register. View Items use case could be used by customer as top level use case if customer only wants to find and see some products. This use case could also be used as a part of Make Purchase use case. Client Register use case allows customer to register on the web site, for example to get some coupons or be invited to private sales. Note, that Checkout use case is included use case not available by itself - payment is part of making purchase.

CHAPTER 05

Implementation and Testing

5.1 Implementation of Front-end Design

This is the front-end Design show when customer want to order. When the customers opens the app for order this page is showed up. For contact the farm admin or visit to show the product see this page. Then ASTHA DAIRY FARM ready to use. Figure (5.1)

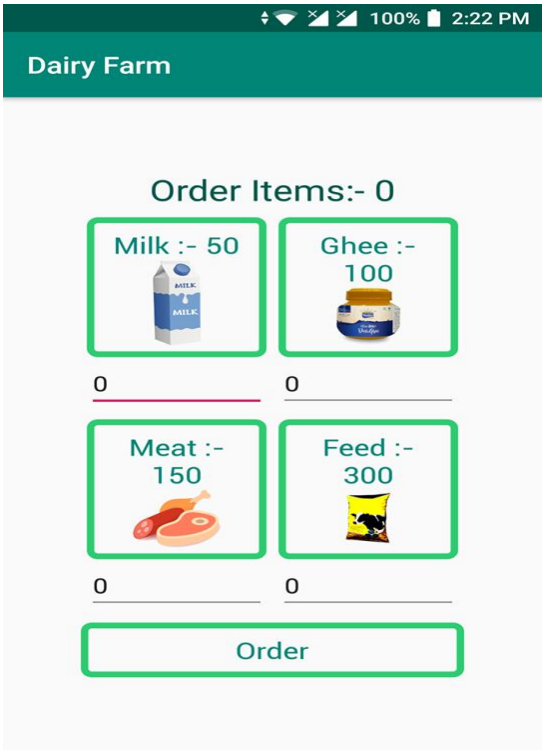


Figure 5.1

5.2 Email Login Page

Here figure 5.2.1 the customers email login page and figure 5.2.2 admin login page.

Customers not need login just need log in when want to order product. And admin must need login.

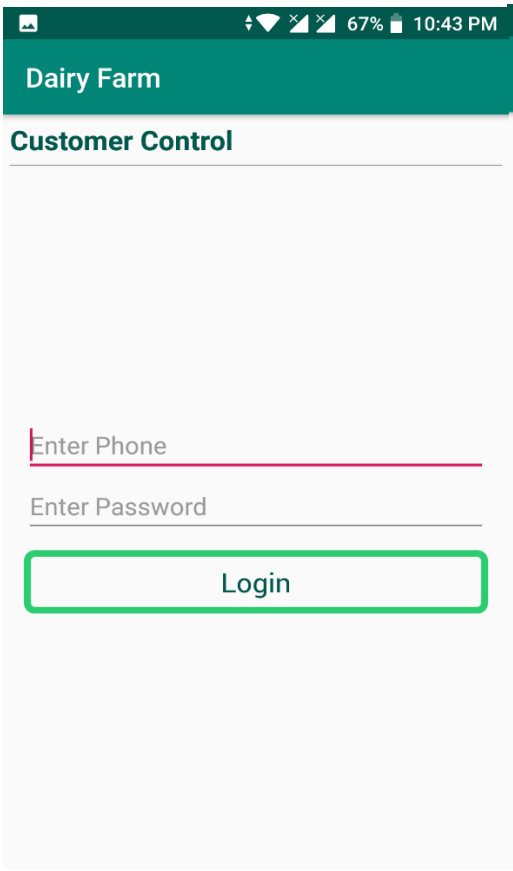


Figure 5.2.1

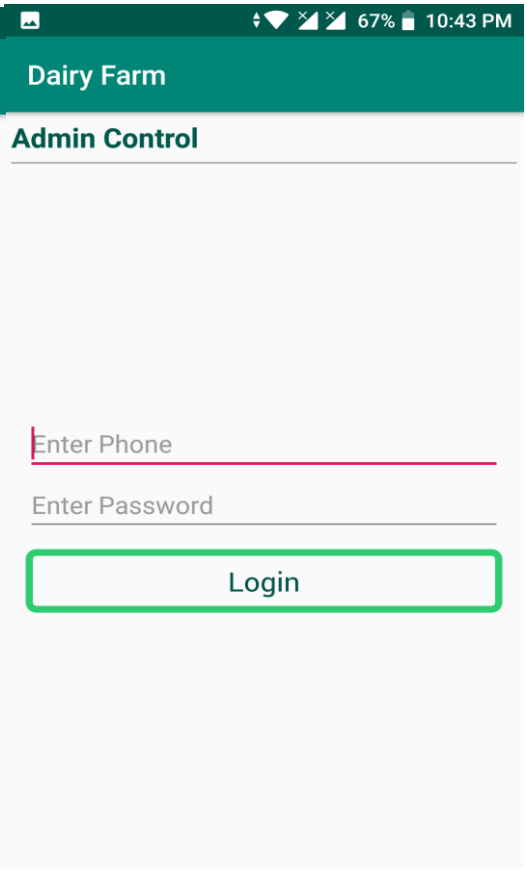


Figure 5.2.2

5.2.2 User Dashboard Page

This page Customers and admin using for profile settings and edit or update. When a customer need online order but he/she change the address so receive this service need edit or update address. Then use it.[2]

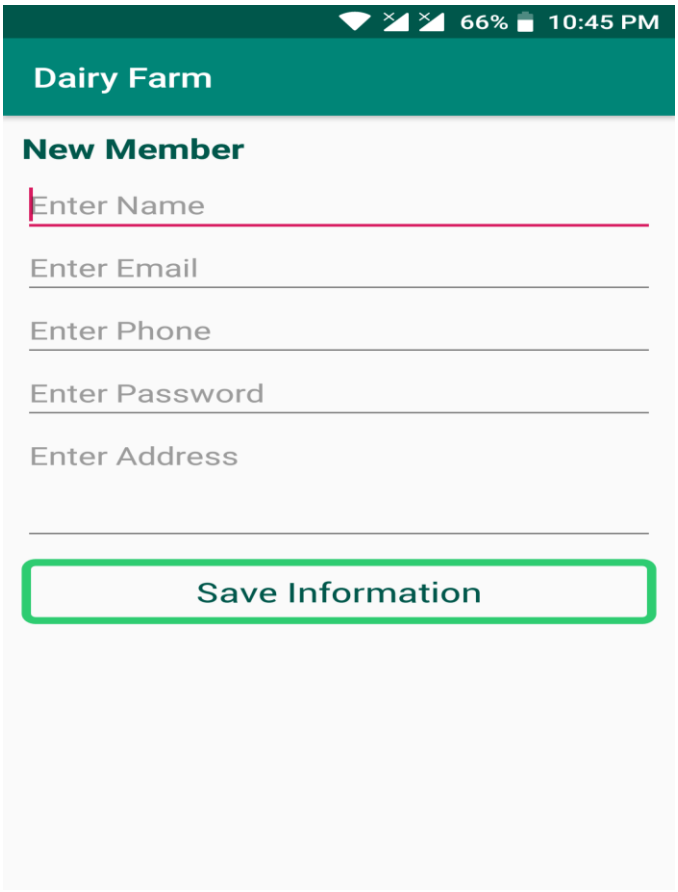
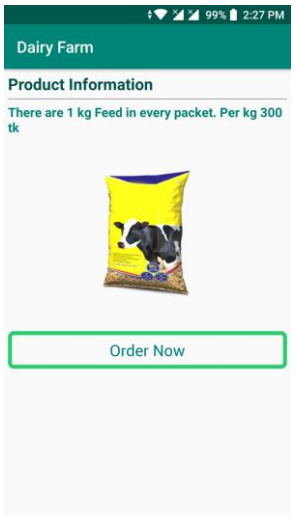
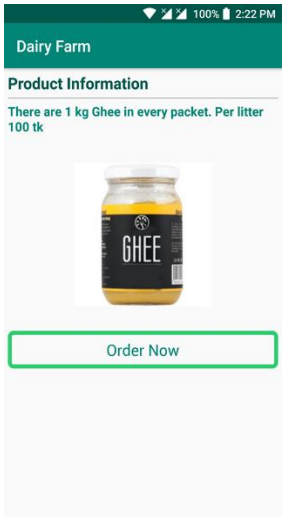


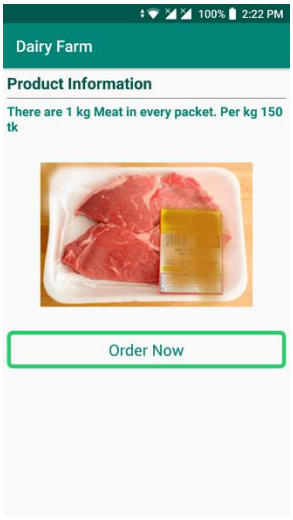
Figure 5.2.2.1

5.2.3: Product Information

There are packet quantity and price for customers.







Milk Figure 5.2.3.1 Feed Figure 5.2.3.2 Ghee Figure 5.2.3.3 Meat Figure 5.2.3.4

5.3 Implementation of Interactions

Implementation of interaction is important part of a work process. Interaction means when we are in an initial function and go to another function that we want same time. We divide the function for a variance of the user and designed very carefully that can attractive for users. An app will be successfully if the user is satisfied using the app. The Satisfaction and attractive level of our system is high.

5.4 Testing Implementation

When a system is implemented and test some separate function is called test implementation [6]. We have tested our system several times. We have tested the following factors:

1. PURPOSE OF STUDY.
2. Email Registration System.
3. Text to speech.
4. Speech to Text.
5. Email Reading.
6. Dictation.
7. Weather report.
8. LIMITATION OF STUDY.

CHAPTER 06

Conclusion and Future Scope

6.1 Discussion and Conclusion

By the grace of **Almighty ALLAH**, we have successfully completed our work and work process. After use time of thinking, Discussion, implementation we are in the last session and so much happy of completion. ASTHA DAIRY FARM is capable in assisting personal task to its user.

Until now user was using typing and got tired. Handicap and blind people were not able to use computer easily. Valuable time wasted in searching content.

But, now these things have changed. ASTHA DAIRY FARM has turned the process. By using this platform for client can easily do their daily task. This process save users time. They can handle all these things from reading an email to weather report, even social communications as telling jokes whenever you're sad just need only voice command. This system can store all previous job information that is helpful for the user.[5]

ASTHA DAIRY FARM Platform for computer users deals with various functions as reading and writing email, reading a pdf book, search content online and offline, provides weather report and fluent social communications over voice command instead of typing. Include of face recognition has added safety for the user.

ASTHA DAIRY FARM is very useful and extremely powerful for each user, specifically for those who are blind and handicap. With the help of AIVI now they can use computer easily. Most valuable time of user is also saved by using this platform. We tried our best to make this project fruitful.

6.2 Scope for Further Developments

We have a future plan for the application. They are:

1. Develop the Bangla language app.
2. Face Recognition under Development.

References

[1]To get idea about app: https://fossbytes.com/essential-free-best-android-app/

[2] https://play.google.com/store/app?hl=en

[3]For Definition of use case diagram:

https://www.uml-diagrams.org/examples/online-shopping-use-case- diagram-example.html?

[4]https://www.interaction-design.org/literature/article/the-7-factors-user-experience

[5] Use for app tools: https://developer.android.com/trainin/appbar/

[6]https://medium.com/@101/android-toolbar-for-appcompatactivity-671b1d10f3

[7] For helpful software:Open to <<https://downloads.tomsguide.com/Software-Android,0702-7134.html

[8]https://downloads.tomsguide.com/Software-Android,0702-7134.html

[9]Discussion and conclusion:https://en.wikipedia.org/wiki/Online_shopping_in_Bangladesh

[10] Definition of system testing: https://en.wikipedia.org/wiki/System_testing

APPENDIX

Appendix A: Project Reflection

In accordance with to me a co-occur group can achieve their aim no matter how hard it is. We were co-occur, completely in consonance and we knew our job well. That fact helped to doing this project.

When we first started this project, we were so active and full of energy but after some days we lost as we were struggling about from where to start. And when we got the starting point we were never looked back and keep moving forward. Whenever a crucial point came we solved it together.

Doubtless, composition of a team is the most important. You need to enlist the right members to form a high-performance team. It was our advantage and good luck that we were to be put in the same group.

At last, after so many hard work and try level we completed this project successfully.